## IN THE CLAIMS

What is claimed is:

- 1-3. (Canceled)
- (Currently amended) The method of claim 3; A method of problem determination in a distributed service-based application, comprising the steps of:

obtaining, via one or more probes, at least one testing result of the application through execution of at least one test group, wherein the test group comprises one or more test cases; and adaptively refining the at least one executed test group when the at least one testing result comprises at least one failure, to expose at least one problem that caused the at least one failure,

wherein the step of adaptively refining the at least one executed test group comprises at least one of generating one or more new test cases and refining the one or more probes, and

wherein the step of obtaining testing results comprises the steps of generating a test group having at least one test case, from a general model of the application; executing the at least one test case of the test group in the application; passing the at least one result of the test group to an outcome analyzer; and verifying the at least one result against expected output at the outcome analyzer, wherein the step of verifying the at least one result comprises the step of marking each test case of the test group with a failure or a success.

## 5-6. (Canceled)

7. (Currently amended) The method of claim 1, A method of problem determination in a distributed service-based application, comprising the steps of:

obtaining, via one or more probes, at least one testing result of the application through
execution of at least one test group, wherein the test group comprises one or more test cases; and
adaptively refining the at least one executed test group when the at least one testing result
comprises at least one failure, to expose at least one problem that caused the at least one failure,

wherein the step of adaptively refining the at least one executed test group comprises at least one of generating one or more new test cases and refining the one or more probes, and

wherein the step of adaptively refining the at least one executed test group comprises the steps of disabling one or more probes that returned one or more results that did not relate to the at least one problem[[;]] and repeating the method of problem determination in a distributed service-based application.

## 8-9. (Canceled)

 (Currently amended) The method of claim 1, A method of problem determination in a distributed service-based application, comprising the steps of:

obtaining, via one or more probes, at least one testing result of the application through
execution of at least one test group, wherein the test group comprises one or more test cases; and
adaptively refining the at least one executed test group when the at least one testing result
comprises at least one failure, to expose at least one problem that caused the at least one failure.

wherein the step of adaptively refining the at least one executed test group comprises at least one of generating one or more new test cases and refining the one or more probes, and

wherein the step of adaptively refining the at least one executed test group comprises the steps of enabling one or more additional probes that return one or more results relating to the at least one problem[[:]], disabling one or more probes that returned one or more results that did not relate to the at least one problem[[:]], adapting the test group to comprise at least one test case focused on the at least one problem[[:]], and repeating the method of problem determination in a distributed service-based application.

## 11-29. (Canceled)